HOME COURSE IN SCIENTIFIC **AGRICULTURE**

TENTH ARTICLE - CORN CULTIVATION.

By C. P. HARTLEY, Physiologist In Charge of Corn Investigations, United States Department of Agriculture.

HE methods of corn cultivation in general use in one section of the country differ greatly from those in another section. That certain kinds of cultivators or plows or methods of planting have been in use in Georgia or Iowa for many years does not prove that implements or methods found successful in other states might not be used there to-

Fall plowing cannot be recommendshould be more generally practiced than at present. If a cover crop or sod is turned under in the autumn of plant food available for the crop next summer. This is true to some extent even though sod is not turned under, inasmuch as the simple loosening of the soil admits atmospheric oxygen and increases chemical action upon vegetable and mineral matter. Fall and winter plowing is one of the best methods of combating insect pests. Because the surface of ground plowed the spring than that of ground not so treated, it does not necessarily follow that there is less moisture in fall plowed ground. The fall plowing has enabled the rainfall better to penetrate the subsoil, thus relieving the surface of its excess of moisture. In the spring fall plowed fields usually contain much more moisture, but at the same time have a drier surface than fields which remain unplowed until spring. In sections where there is much rain during the winter it is better not to harrow the fall plowed land in the autumn.



IOWA CORN.

This is especially true of fine clay soils that run together and pack readily. Deep spring plowing and spring subsolling are likely to result in diminished crops, especially if done after the spring rains.

For a deep, rich soil deep plowing is best, provided it is done in the fall or does not render the soil too loose and dry. For thin clay soils subsoiling is better than very deep plowing. The plowing should not be at the same depth from year to year, A little subsoil turned to the surface occasionally allows the elements to act upon it, liberating plant food, and as it becomes mingled with surface soil and vegetable growth the soil depth will be increased. It is well to plow a little deeper each year for several successive seasons and then for one season give a plowing at about half the depth of the deepest plowing. The plow should be so adjusted that it will turn all the soil and leave the surface smooth. In every instance spring plowed land should be pulverized the same day it is plowed.

Corn planted early most often gives the best yield. Corn should, of course, not be planted in cold or wet ground, but by good drainage, fall plowing, stc., every farmer should strive to have his land in good condition to plant at

the proper time. Underground drainage will prove stirring is not necessary, except in so most profitable in the end in handling far as it is required to keep weeds low, wet land, but as this is rather ex- from starting. Many crops are cut use low, flat land for corn before it is cause the corn is too tall for use of a possible to have it tile drained. Some- double cultivator without breaking times such fields are plowed in small down the stalks. If the condition of a row of corn is planted on the ridge or tion should continue, even though the back furrow of every "land." This places | corn is tasseling. the plants above surface water and for | It is sometimes profitable to remove this reason is satisfactory during wet | weeds by the costly process of hand weather, but the high situation of the hoeing and even at as late a date as stakes is a disadvantage during dry the sliking time of the corn. weather. In a method of planting giving general satisfaction for such fields | zultivator one man can cultivate as the ground is back furrowed in lands many acres as two men with a one eight feet wide, making thereby dead lorse cultivator.

rurrows every eight feet. On each side and two feet from each dead furrow shallow rows are marked off, and in

them the corn is planted. The labor saved by the use of plantthoroughly tested and adjusted.

containing plenty of moisture at plantgrow. This method of planting is es-

growing season. The lister fulfills the requirements of this method. low or stiff clay solls.

of corn have found it profitable to use

as their checkrowers. distributed constitute the best stand of good ears decreases. If planted varieties producing tall stalks. The distance for planting in a particular stand may be obtained by very thick planting, the stalks will not be thrifty, using the poor seed. If the seed shows a germination of 97 per cent or more

hills and will be more easily accomdriven at right angles to the rows of been in vain. the first planting and is operated so as to plant just as it crosses each row. For this purpose two men will be required, one to drive and one to trip the

checkrower as it crosses the corn rows. The most successful corn growers dark green color.

Horse weeders and harrows should be used when needed to break a surthe corn is up or large enough to be worked with other implements. Durthat throw the soil but very little should be used, and fenders are usually found desirable to prevent the covering of the plants.

Many comparative experiments of deep-and shallow cultivation have been made, and, on the whole, the results excessive rains have packed the soil and kept it water soaked deep cultivamust be avoided so far as possible. After the plants have reached a height of two or three feet the soil even in usually a shallower cultivation will ture a loose soil mulch two or three while in your midst. inches in thickness is advisable.

Corn should be cultivated often To this end a greater number of cultivations will be necessary when rains surface soil to run together and crust, This crust must be broken and the soil mulch restored or evaporation will soon

rob the soil of its moisture. longer the drought the more frequent should be the cultivations. After a

Cisco's Farewell Letter.

The long days and nights of work and worry for the good of of the soil. If it is a stiff, heavy clay, that it was possible for me to do. undertaking. ing the seed in a furrow, covering it in the grade during the fall term you to see the better way. slightly, and then gradually cultivat- I had charge of a class of pupils ing the furrow full of soil as the plants that were to me good friends and pectally well adapted to deep soils willing pupils. I flatter myself where dry weather is likely to prevail with the opinion that I caused Mr. H. G. Cottle during the middle or latter part of the some of them at least to see the better way and to resolve for the Dear Editor:-The lister is used for planting fields best in them. They worked on that have been thoroughly plowed and till the close and when the final mon schools of Kentucky for the short. Cisco pulled himself out cornfield or stubble field without previ- examinations came, not one fail- past eight years, and Morgan of some very bad holes by using ous preparation. This latter practice, ed to pass from the former grade County being my former home I good judgement. In the seventh however, is not recommended for shall in which he was working. The wish to give the Courier my and inning he struck out Hiram means of a check rower than by any ing, every one to the High as this is a subject that has been the bases full. other device. Some successful growers School department by graduat- so rarely noticed by the people The game was very exciting ed for all soils and localities, but two row markers set the same width ing and receiving his dipolma of our county. from the management of the A proper number of stalks evenly school. At the beginning of the my own people, and the many the very first to the last inning. decomposition will increase the amount for the production of ear corn. It winter term the Board saw fit to boys and girls whom I know and As you will notice by the box planted thicker than this the weight of change my work to the Normal to get this subject before the eyes score that both teams scored in stover increases and the production Department, and after a winter of the many entilligent readers the first and third innings. thinner the weight of stover, as well as of hard work we succeeded in of the Courier and especially the Friday's victory run the total of ears, decreases. Small growing va- preparing thirty for certificates. teachers who are to train the up to seven straight for the searieties should be planted thicker than From our department we had 34 young minds who are to soon son without a single defeat. soil should be decided upon and the tion and out of the thirty-four of the county. I wish only to the pitching of both Cisco and planter adjusted to plant accurately we got 11 first-class certificates, give you my answer in brief and Davis the batting of M. Cisco in the fall is drier at planting time in and regularly. Spots missed by the the spring than that of ground not so planter, as well as those depleted by 15 second-class and four third-hope to hear from others on this and Davis, and Carter's bingle crows, insects, etc., greatly decrease class, and had four failures. A important subject. My answer is in the last half of the ninth inthe yield per acre. The custom of mong the last named four some this: Eugenics is a science of in- ning which gave our boys the stand of stalks desired is not a good of them were only in our class creasing efficiency of species by victory and broke up a good one. If the seed germinates poorly it eight or ten days, and on that proper selecting or breeding. should not be planted, for, although a account we feel that we are not so much to blame for their failand a reduced yield will result from ure. It has been our desire to work for the good of the school in a thorough germination test and it ever since we were elected to the is then properly planted the stand will position of teacher, and how well be almost perfect unless very adverse we have done our duty remains weather ensues, in which case all the plants will be so injured that the planting of the entire field again will erty and the country who patronbe preferable to replanting the missing ized the department to say. But largely attended of any ever held Cottle If ished. If a field has been drilled in but from the many urgent requests one direction and for any reason a poor on the part of those who are in- day night the program extended stand is obtained it can be replanted terested in the school for me to throughout the entire week.

> friends in the town, and on their ly deserved. The crowds were Armitage ss account I would like to stay and large, orderly and attentive; the May 1b realize the importance of thorough ear- health and the difference in sal- and friends of the school was in- A. Henry of ly cultivation, thus preventing any ary that I can get by going away tense. cause of weeds or crusted soil. Thrifty I find it to my interest to leave The graduating class was comcorn plants are thick, strong and of for the West where I will take posed of the following: Misses charge of the Davenport (Okla- Lillian Cisco, Rebekah Phillips homa) High School. There I and Carrie Blair; Messrs, Chiles Innings face crust, check insect depredations will have the principals place and Henry and Clay Phipps. The W. L. or kill young weeds that start before my wife the Primary department. address to the graduating class G. Camp 20100000-3 My reason for making this state- of the High School was delivered ing the first cultivation, or while the ment here is because I have by Eld. H. M. Eastes, of More-Davis and Herbert Armitage, plants are very small, narrow shovels many friends who are inquiring head. Prof. C. E. Clark, of for West Liberty, Cisco and Cisco. after my future intentions and I Cannel City, delivered the ad- Struck out by Davis 9 by Cisco 7. use this means of informing dress to the Eighth Grade grad- Base on balls off Cisco 3 off Davis them of my future work.

> Now, to all those who have stood by me in my work here are in favor of shallow cultivation. If and held up my hands with kind both to the management of the and Cottle. Maxey, M. Cisco words of encouragement, I wish and kept it water soaked deep cultiva-tion will help to dry and acrate the to say From the bottom of my is our hope and belief that it por-2:30 time 2 hours—Umpires Potts soil, Breaking the roots of the plants heart I thank you,' and should tends better things for West Libthe opportunity ever come when erty and Morgan county in the I can be of service to you don't future. the middle of the rows should not be hesitate to call on me for I will oultivated deeper than four inches, and always regard it as a pleasure to prove better. For retaining soil mois repay the kindness shown me

If I have an enemy here he is enough to keep down weeds and to self made and for no mean act of maintain constantly a loose soll mulch mine toward him. My life has till the corn has attained its growth. been an open book among you, and it remains for you to call atat intervals of about a week cause the tention to any unmanly act on my part.

Of all the real friends who have stood by me in my effort to It is a mistake to think that the do good while working here, I look upon the Licking Valley fine mulch of about three inches in Courier as the best and most efdepth has been produced its frequent fective. It has been through the kindness of that paper that I

> newspaper. I am also in position to know with your vote.

tic to the school, but wants to be in full accord with it if given the proper treatment. I would ers is so great that for profitable corn my department have at last suggest that the management of

NOAH CISCO.

West Liberty, Ky.

sincerely yours. J. C. CANTRILL.

Successful Commencement. The commencement exercises Stamp ss of the West Liberty High School Carter 1b which closed last week were the D. Henry of most successful and the most B. Cisco n in West Liberty. Beginning Monwith a checkrower set to drop one kernel at a time and operated without remain and teach next year I Lack of space forbids us to make G. Camp the tripping chain. The checkrower is judge that my efforts have not special mention of the exercises H. Armitage c 4 0 0 5 4 on each night, which we would O. P. Henry 3b 4 2 2 1 1 I feel that I have a host of real like very much to do as it is rich- Davis p teach, but on account of my wife's interest manifested by patrons Fugate 2b

uating class.

ment was highly satisfactory, tage O. P. Henry, Fugate and school and to the public, and it and Stamp 2. Game called at

A Narrow Escape

Mr. and Mrs. C. W. Womack, had give the line up nor details of the a narrow escape from serious in- game for want of space. This jury Monday Morning. She was makes the 8th game the home leaning against a screen in an boys hane played and won. Let's up-stairs window when it gave see how long you can keep it up way letting her fall to the ground boys. a distance of about twelve feet. Strangely enough she escaped almost entirely unhurt and was playing about within a short time as though nothing had hap-

Notice.

have been in communication all The attention of some of our so effective in Jamaica and elsepensive it is sometimes desirable to short by stopping the cultivation, be the time with the friends of the subscribers is respectfully called where, is of little use here. Neschool. And permit me to say just to the provision in our "Straw cessity is the mother of invention, here that it is my opinion that Vote" that the person voting and nature and science together staps or "lands" 4 to 6 feet wide, and the soil demands it shallow cultiva- the management of the school must be a paid-in-advance yearly have at last discovered something has not taken the right look of subscriber. We have re- which it is hoped may extermithings in this connection. If cently received a number of bal- nate the dreadful pest ever the West Liberty High lots from persons who were not The discovery is nothing else School attains to its highest de- entitled to vote under this pro- than a "beneficent" snake which With a good riding or walking double gree of efficiency it will have to vision, Please bear this in mind is harmless to man and which recognize the power of the home and if you are in arrears send in kills and eats the poisonous the price of a year's subscription species.

that the paper is not antagonis- West Liberty-Wins From Gra- is a thick, muscular snake about hams Camp by the Score Of 4 To 3.

growing their use is indispensable drawn to a close and now I can the school take a wider view of and hardest fought battles ever that a pointer will "scent" game. Walter Henry, of business yesterday. Every spring the planter should be only look back upon the past school needs and by all means seen on the the local lots, the When tackling its prey, which is The proper depth to plant must be with regret for any failure on treat your home paper in such strong Graham's Camp team frequently considerably bigger governed by the quality and moisture my part to do the best for them way as to enlist its help in your went down in defeat at the hands than itself, the "good" snake asof our boys Friday afternoon by sumes a lethargic air, as if it ing time, one inch is sufficiently deep. But in this look of retrospection To all the boys and girls of my the close score of 4 to 3. The were glutted with food and could but if it is a light, open, dry soil three I can see many things of which I departments I wish to say Good game was a pitcher's battle from not fight. Seeing this the bad Court at Morehead this week. or four inches is a satisfactory depth.

Fortify against dry weather by plant.

By and God bless you and help start to finish between Byron snake immediately attacks.

By and God bless you and help start to finish between Byron snake immediately attacks. Having been a teacher of com- with a rattling single through -Ex. Perhaps more corn is now planted by Eighth Grade succeeded in pass-swer to the word, "Eugenics" Armitage retiring the side with mestic commerce has made a re-

throughout owing to the fact that But for the interest I have for the score was tied from the

who took the teachers examina- make up the citizenship of the The features of the game was ue game.

Following is the box score. W. Liberty Maxey 2b C. Henry 3b 4 2 0 13 0 0

ab h r po as e 4 3 1 1 4 0 4 2 0 0 0 1 4 0 0 14 1 2 4 1 0 4 2 0 4 0 0 0 0 0 Hale rf 4 0 0 0 0 0 3 0 0 0 0 0

Total. 35 8 3 25 12 4 123456789 total 201000001-4

Batteries for Graham's Camp none, Hit by pitcher by Davis 1 On the whole the Commence- by Cisco 1, stolen bases H. Armiand Daniel.

On Saturday the Cannel City boys came down for a game with the local sluggers, the game resulting in a score of 12 to 6 in Ruth, 5 year old daughter of favor of West Liberty. We can't

Snake Kills Snake.

In South America they are now using snakes to catch snakes. Even in the most civilized parts of Brazil over 1,000 persons are killed annually by snake bite.

The mongoose, which proved

four feet long. It is possessed of an insatiable appetite for pois-

onous vipers and can tell of the In one of the prettiest and approach of one in the same way

Cisco of the locals and Roy Davis | This is just what the other of the visitors, and either side wants, for, being rendered by had an equal chance to win un- ntture completely immune from Jenkins, Ky. 5-25-1913 til the last half of the ninth when the poison, it seizes its enemy be-Walter Stamp got a hit and stole fore it has had time to recover second, and Kelly Carter sent from the charge and gives a fahim over with the winning run all bite at the base of the brain.

Efficiency.

The bureau of foregin and doport that a comparison of seven- has returned home. teen industries in Great Britan the manufacturing establish- calling on our grocers. ments in this country have highhalf times as many wage-earners Miss Kathleen Phipps. and one-sixth more power are needed in the United Kingdom than in the United States to pro- take a much needed rest,

Plainly the people of the United States have nothing to fear in the department of commercial effort.-Commoner.

You are hereby authorized to remove my announcement from the column of your valuable pa- Margaret Johnston from Friday till Sunday. per. And now for the benefit of

I wanted to run a fair race, Saturday night. and let the party decide upon the but as my opponents have promised an unfair number of deputies (or so I have been informed) Herbert and Hiram Armitage and G. B. I feel that the only honorable' 4 thing is for me to quit the race ing with Graham Camp. in favor of no one. I have didacy of any other man in the gan and Wolfe, and will visit in Menefee Jailer's race. So I unconditional- county before he returns to Virginia. ly liberate my friends from any thanks for the encouragement given me I remain,

Yours most sincerely E. J. WEBB.

COURIER READERS

Expressing Their Choice for the Thursday afternoon. County Offices. Have You?

State Senator Chas. D. Arnett Representative J. H. Sebastian E. F. Cecil County Judge Alex Whiteaker S. S. Dennis G. V. Lykins County Attorney

S. M. R. Hurt Frank Kennaird H. C. Rose B. R. Keeton O. J. McKinzie

County Superintendent T N Barker C E Clark J W Davis County Clerk

Ren F Nickell Lee Barker S S Oldfield Sheriff L A Lykins Jas M McClain

B S Stamper

G W Stacy H C Combs W W McClure Ed Webb

David N Haney W F May John Patrick W H Lindon S D Goodwin

The mussurana, as it is called, WHAT YOU HAVE TO SELL.

Local and Personal.

John Coffee, of Logville, was in the city Walter Henry, of Henry, was lere on

Davis Johnston, of Dan, visited relatives

in this vicinity last week.

Judge O. P. Carter, of Bonny, was in the city on business yesterday.

Judge A. N. Cisco is attending Circuit

C. C. Maxey and family are camping at

the mouth of Spaws creek this week. Denny Nickell, of Neola, attended com-

mencement here the last of last week. John Nickell, of Insko, was here several days last week attending commencement,

Winfred Cox has returned from Lexington where he has been attending the State

Miss Mabel Thompson, who has been attending school at Midway the past term, has returned home.

Miss Stella Cisco, who attended Hamilton College at Lexington, the past term,

Tom Boyd, of Morehead, representing and the United States shows that Kitchen, Whitt & Co., was here yesterday

Miss Josephine Phillips, of Liberty Road, er efficiency, and that two and a spent a few days last week with her cousin

Prof. H. C. Wilson left Tuesday for Lexington where he will spend vacation and

duce a net output of equal val- W. M. Kendall left Sunday for Louisville to visit Mrs. Kendall who is being treated at St. Joseph's Infirmary.

R. C. Dellart, who has a position with the Cincinnati Traction Co, visited home folk last week and this. Dr. A. P. Gullett will be at Netty

Ky., June 5 to 13 inclusive to do den-Misses Pearl Vance, of White Nak, and

Wannie Williams, of Malone, visited Miss Onite a crowd of Hazel Green people atmy friends I shall give the reason tended the play given by the Normal Department at the High School auditorium

Henry Cole has bought the Denny Lymerits of the various candidates; kins stock of groceries and will continue the business at the same stand. Watch for

> Carter, of Frenchburg, were here last Friday at the ball game, the two former play-

Maj. J. W. Fields, of Cochurn, Va., is visno interest whatever in the can- iting his many friends and relatives of Mor-

Clay Cisco, of Mt. Sterling, attended obligation to me, with the high- Decoration Day services at the family buryest appreciation and many ing ground near Mathew and stapped over night in West Liberty as he went home.

C. W. Womack and family have gone on a sixty days camping trip. Mr. Womack's health was such that he required rest from his business and he is camping in the hills.

Misses Rose Henry, of Pomp, Mattie Samper, of Sellars, Orange Oakley, city, and Mr. Dorsa Wilson, of Insko, were welcome visitors at the Courier office

Prof. Noah Cisco, Scout Master, and his Boy Scouts, accompanied by quite a crowd of West Liberty's young ladies and gentlemen, are camping for the week on the riv-104 er a few miles above town. It is rumored that J. M. Cottle and

64 Miss Anna Callahan were secretly 56 married one day last week. In the absence of first-hand infornation this is the best account of the affair we 50 can give. 55 Work began on the John Carter oil 42

well this week, and I. N. Phipps has moved his machinery on the Sturdi-49 vent place in the lower end of town 51 and will begin work as soon as a der-39 rick can be built. 15 Mesdames J. P. Haney, Henry Cole

8 and J. H. Sebastian will serve les cream and sherbet at Henry Cole's grocery Friday afternoon and evening 65 for the benefit of the M. E. church. 48 Everybody invited.

Ezel, Ky., June 3, 1913.

Publisher Courier, 64 West Liberty, Ky. I enclose some ballots for "straw vote," 45 and check for renewal of B. F. Davis.

43

18

17

Respectfully T. F. CARR. LOST-A bunch of keys for the Graded

School building. Keys were lost the last part of commencement week. A suitable reward will be paid for their return to the 42 board of trustees. 51

C. W. WOMACK Chairman.

Child Badly Hurt

A twelve year old daughter of 24 Will Gambill's who lives on long 29 branch two miles above town, 41 fell from a Service tree Satur-17 day, about twenty feet, striking 45 a solid rock, and sustained serious if not fatal injuries. Up to USE THE COLUMNS OF THE the present she is in a semi-con-COURIER TO TELL THE PEOPLE scious state and her recovery is

considered very doubtful.